

CLAIM AMENDMENTS

1-3. (Cancelled).

4. (Currently Amended) A method for treating a patient with chronic pain, comprising:  
~~identifying a patient experiencing sensations of chronic pain;~~  
~~providing at least one leadless stimulator having at least two electrodes;~~  
implanting ~~the~~ at least one leadless stimulator having at least two electrodes adjacent to at least one peripheral nerve in the thorax of the patient, ~~said the~~ peripheral nerve being responsible at least in part for the sensations of chronic pain experienced by the patient;

generating stimulation pulses within the at least one leadless stimulator in accordance with stimulation parameters; and

delivering the stimulation pulses from the electrodes of the at least one leadless stimulator to the at least one peripheral nerve of the patient ~~for the purpose of, thereby~~ reducing the sensations of chronic peripheral pain experienced by the patient;

~~wherein the leadless stimulator has a size and shape suitable for placement of the electrodes adjacent to the at least one peripheral nerve;~~

~~wherein the at least one peripheral nerve comprises at least one of an intercostal nerve, an intercostal nerve branch, a greater occipital nerve, a lesser occipital nerve, and a third occipital nerve.~~

5. (Currently Amended) The method of claim 4 wherein the stimulation pulses are delivered at less than about ~~[[1-]]~~10mA.

6. (Currently Amended) The method of Claim 4 wherein the stimulation pulses are delivered at less than ~~about 100 to~~ 150Hz.

7. (Cancelled).

8. (Currently Amended) A method for treating a patient with chronic pain, comprising:

~~identifying a patient experiencing sensations of chronic pain;~~

~~providing at least one leadless stimulator having at least two electrodes;~~

implanting ~~the~~ at least one leadless stimulator having at least two electrodes adjacent to at least one peripheral nerve in the thorax of the patient, ~~said the~~ peripheral nerve being responsible at least in part for the sensations of chronic pain experienced by the patient;

generating stimulation pulses within the at least one leadless stimulator in accordance with stimulation parameters; and

delivering the stimulation pulses from the electrodes of the at least one leadless stimulator to the at least one peripheral nerve of the patient ~~for the purpose of, thereby~~ reducing the sensations of chronic peripheral pain experienced by the patient;

~~wherein the leadless stimulator has a size and shape suitable for placement of the electrodes adjacent to the at least one peripheral nerve;~~

wherein the at least one peripheral nerve comprises at least one of an intercostal nerve, ~~an intercostal nerve branch, a greater occipital nerve, a lesser occipital nerve, and a third occipital nerve~~ branch/division of an intercostal nerve.

9-14. (Cancelled).

15. (Currently Amended) A method for treating a patient with chronic pain comprising:

- ~~identifying a patient experiencing sensations of chronic peripheral pain, wherein the chronic peripheral pain includes at least one of chronic neuropathic pain, failed back surgery syndrome, arachnoiditis, occipital neuralgia, peripheral pelvic pain, cardiac pain and back pain;~~
- ~~providing at least one leadless stimulator having at least two electrodes;~~
- ~~providing at least one sensor;~~
- implanting the at least one leadless stimulator having at least two electrodes adjacent to at least one peripheral nerve in the thorax of the patient, ~~said the~~ peripheral nerve being responsible at least in part for the sensations of chronic peripheral pain experienced by the patient;
- using ~~the~~ a sensor to sense a physical condition;
- determining stimulation pulses based upon the sensed condition;
- generating stimulation pulses within the at least one stimulator in accordance with the stimulation parameters; and
- delivering the stimulation pulses from the electrodes of the at least one stimulator to the at least one peripheral nerve of the patient ~~for the purpose of, thereby~~ reducing the sensations of chronic peripheral pain experienced by the patient;
- ~~wherein the stimulator has a size and shape suitable for placement of the electrodes adjacent to the at least one peripheral nerve of the patient.~~

16-26. (Cancelled).

27. (Currently Amended) A method for treating a patient with chronic pain, comprising:

~~providing at least one leadless stimulator having at least two electrodes;~~  
implanting ~~the~~ at least one ~~leadless stimulator~~ electrode adjacent to at least one peripheral nerve in the thorax of the patient, said the peripheral nerve being responsible at least in part for the sensations of chronic pain experienced by the patient;  
~~generating stimulation pulses within the at least one leadless stimulator in accordance with stimulation parameters; and~~  
delivering the stimulation pulses from the at least one electrode~~[[s]]~~ of the ~~at least one leadless stimulator~~ to the at least one peripheral nerve of the patient ~~for the purpose of, thereby~~ reducing the sensations of chronic peripheral pain experienced by the patient;  
~~wherein the leadless stimulator has a size and shape suitable for placement of the electrodes adjacent to the at least one peripheral nerve;~~  
~~wherein the at least one peripheral nerve comprises at least one of an intercostal nerve, an intercostal nerve branch, a greater occipital nerve, a lesser occipital nerve, and a third occipital nerve.~~

28. (Cancelled).

29. (Newly Added) The method of Claim 4 wherein the at least one peripheral nerve comprises an intercostal nerve.

30. (Newly Added) The method of Claim 4 wherein the at least one peripheral nerve comprises a branch or division of an intercostal nerve.

31. (Newly Added) The method of Claim 4 wherein the chronic pain includes cardiac pain.

32. (Newly Added) The method of Claim 4 wherein the chronic pain includes back pain.

33. (Newly Added) The method of Claim 8 wherein the stimulation pulses are delivered at less than about 1-10mA.

34. (Newly Added) The method of Claim 8 wherein the stimulation pulses are delivered at less than 150Hz.

35. (Newly Added) The method of Claim 8 wherein the chronic pain includes cardiac pain.

36. (Newly Added) The method of Claim 8 wherein the chronic pain includes back pain.

37. (Newly Added) The method of Claim 15 wherein the stimulation pulses are delivered at less than about 1-10mA.

38. (Newly Added) The method of Claim 15 wherein the stimulation pulses are delivered at less than 150Hz.

39. (Newly Added) The method of Claim 15 wherein the at least one peripheral nerve comprises an intercostal nerve.

40. (Newly Added) The method of Claim 15 wherein the at least one peripheral nerve comprises a branch or division of an intercostal nerve.

41. (Newly Added) The method of Claim 15 wherein the chronic pain includes cardiac pain.

42. (Newly Added) The method of Claim 15 wherein the chronic pain includes back pain.

43. (Newly Added) The method of Claim 27 wherein the stimulation pulses are delivered at less than about 1-10mA.

44. (Newly Added) The method of Claim 27 wherein the stimulation pulses are delivered at less than 150Hz.

45. (Newly Added) The method of Claim 27 wherein the at least one peripheral nerve comprises an intercostal nerve.

46. (Newly Added) The method of Claim 27 wherein the at least one peripheral nerve comprises a branch or division of an intercostal nerve.

47. (Newly Added) The method of Claim 27 wherein the chronic pain includes cardiac pain.

48. (Newly Added) The method of Claim 27 wherein the chronic pain includes back pain.